



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 3727
Examiner: Tri M. Mai
Serial Number: 10/652,141
Filing Date: 08/29/2003
First Inventor: Jonathan H. Hurd
Title: A Cargo System Attachable to a
Roof Rack

**DECLARATION
of the INVENTOR
under 37 C.F.R. § 1.131**

CERTIFICATE OF MAILING

I, Jeffrey Schox, hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

on the following date:

Date: 23 AUG 2006

By: 

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Jonathan H. Hurd hereby declares:

1. That I am the inventor of the claimed subject matter of the above-identified application.
2. That I conceived the subject matter of Claims 17-23 and 33 in the United States before 28 January 2003 (the priority date of U.S. Pat. No. 6,918,512), as evidenced by the 15 April 2002 receipt date of Disclosure Document 509917 (attached as Appendix A)

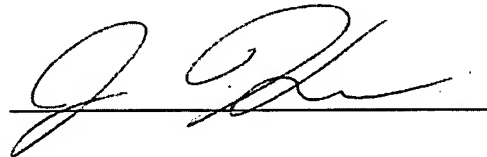
3. That I conceived the subject matter of Claims 10-16 and 24-32 in the United States before 28 January 2003 (the priority date of U.S. Pat. No. 6,918,512), as evidenced by the 06 November 2002 receipt date of Disclosure Document 521393 (attached as Appendix B)

4. That I continuously worked with reasonable diligence on the claimed subject matter from the conception date of the invention (before 28 January 2003) to the filing date of an application for the invention (on 29 August 2003), as evidenced by the 28 March 2003 date on the Quotation for a foot bracket (attached as Appendix C) and by the 24 June 2003 date on the Manufacturing Drawing for the foot bracket (attached as Appendix D).

5. That all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statement may jeopardize the validity of the above-identified application, and any patent issuing thereon or any patent to which this declaration is directed.

Date: 8/22/06

By:



Jonathan H. Hurd

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APPENDIX A



April 1st, 2002

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

DISCLOSURE DOCUMENT NO.



509917

RETAINED FOR 2 YEARS

THIS IS NOT A PATENT APPLICATION

PTO-1652 (8/99)

Request for Participation in Disclosure Document Program:

Disclosure of **Jonathan Hurd**

Entitled: **Portable Automobile Roof Rack Cargo Box.**

Sir/Madam:

Attached is a disclosure of the above entitled invention (consisting of 1 Sheet of written description and 9 separate drawings or photos), a check for \$10.00, a stamped, addressed return envelope, and a duplicate copy of this letter.

It is respectfully requested that this disclosure be accepted and retained for two years (or longer if it is later referred to in a paper filed in a patent application) under the Disclosure Document Program and that the enclosed duplicate of this letter be date stamped, numbered, and returned in the envelope also enclosed.

The undersigned understands that (1) this disclosure document is neither a patent application nor a substitute for one, (2) it's receipt will not become the effective filing date of a later filed patent application, (3) it will be retained for two years and then destroyed unless it is referred to in a patent application, (4) this two year retention period is not a "grace period" during which a patent application can be filed without loss of benefits, (5) in addition to this document, proof of diligence in building and testing the invention, and/or filing a patent application on the invention, may be vital in case of an interference, and in other situations, and (6) if such building and testing is done, signed and dated records of such should additionally be made and these should be witnessed and dated by disinterested individuals (not the PTO).

Very Respectfully,

Signature of Sole/First Inventor

JONATHAN HURD

Print Name of Sole/First Inventor

Signature of Joint/Second Inventor

Print Name of Joint/Second Inventor

1114 Woodlawn Ave.
Ann Arbor, MI. 48104

Enclosure:

As Stated Above

Invention Disclosure

Page _____ Of _____

Inventor(s): Jonathan Hurd

Address(es): 1114 Woodlawn Ave, Ann Arbor, MI. 48104

Telephone: 734-995-9052

Title of Invention: **Portable Automobile Roof Rack Cargo Box.**

Idea Conception: I developed this idea because no automobile roof Cargo Style box on the market fit my needs. The current Cargo Style boxes that fit onto automobile roofs are typically large, difficult to take on and off the car, and unable to store in an upright position. This typically results in a large box that is on top of your car 100% of the time and actually being used less than 2-3% of that time. Added to this I grew frustrated storing the gear for my particular activities on different shelves and hooks in the house/ garage. I wanted something I could store my gear in while not in use but then easily place on top of my vehicle.

Advantages of the Invention: My design can be accessed on the horizontal and vertical planes. This allows for easy access while on top of the vehicle, while being stored in the vertical position, or when resting on the ground in the vertical position. The smaller size makes it practical to remove and carry while full of gear. The current cargo boxes typically must have all the gear removed before the actual cargo box can be removed from the car roof. The built in wheels allow for easy transportation while the Cargo Box is not attached to a storage bar or on the vehicle. The method of attaching the Cargo box to the vehicle and storage bar make it fast and easy to attach and remove, allowing the user to remove it from the vehicle and place it in storage while it's not being used.

Description & Sketch: The Roof Rack Cargo Box is comprised of a top and bottom housing. These housings can be made from many different types of plastics, fiberglass, Kevlar or other such material. The shape of the main or bottom housing allows for the Cargo box to be placed on the vertical or horizontal access without the contents coming out.

Ramifications: By using this product the user has an easy method for going from the storage of their gear to placing their gear on top of the car without having to remove the gear from the storage container. Furthermore because of the easy method for attaching and removing the Cargo Box the user will be much more apt to remove the box while not in use.

Inventor(s): _____

Date: _____

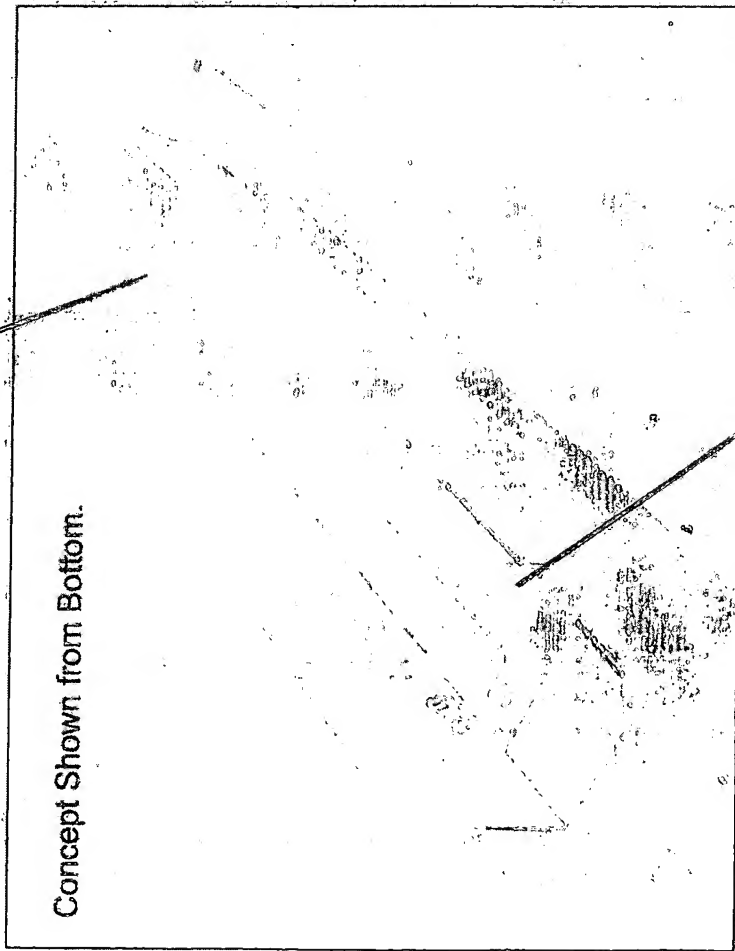
The above confidential information is Witnessed and Understood:

Date: _____

Attachment Method #1 - User turns screw which moves the engagement block towards vehicle cross bar. The engagement piece on the opposite end is stationary causing tension between the 2 cross bars thus securing the cargo box.

Stationary Engagement piece.

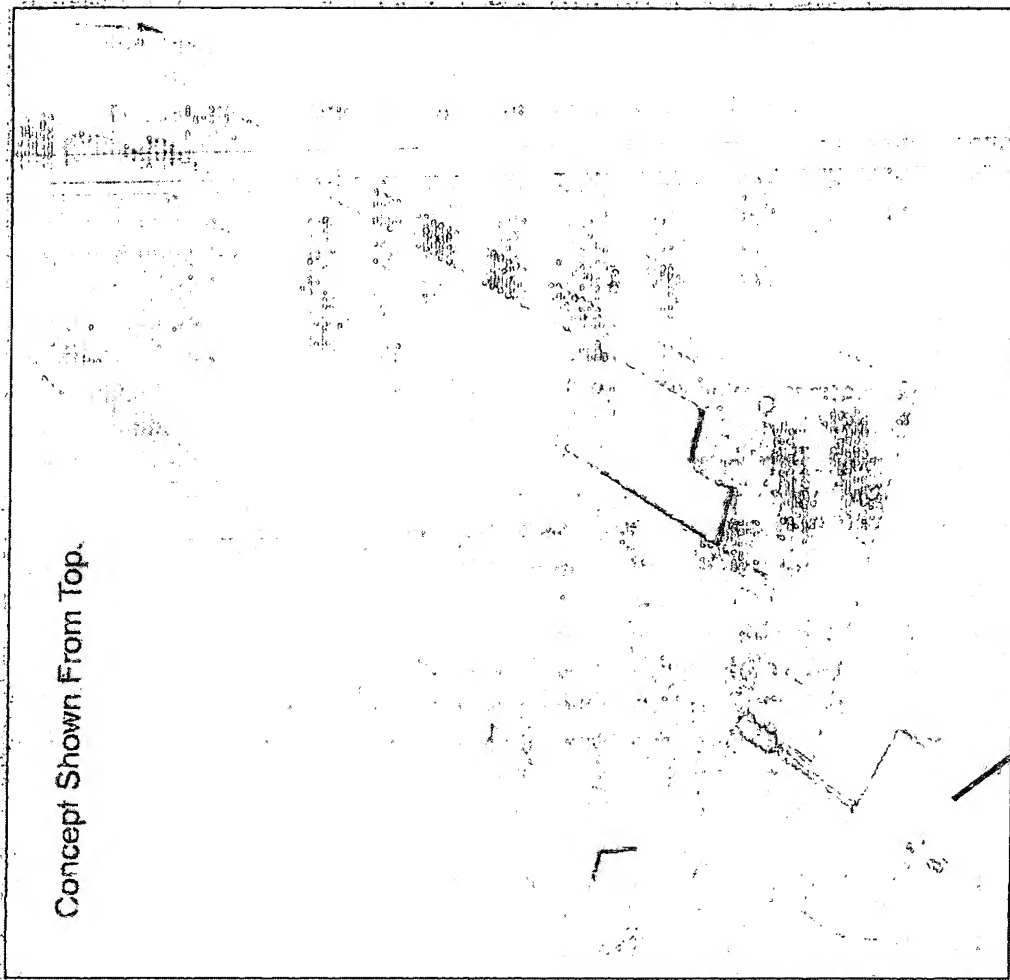
Concept Shown from Bottom.



Screw knob

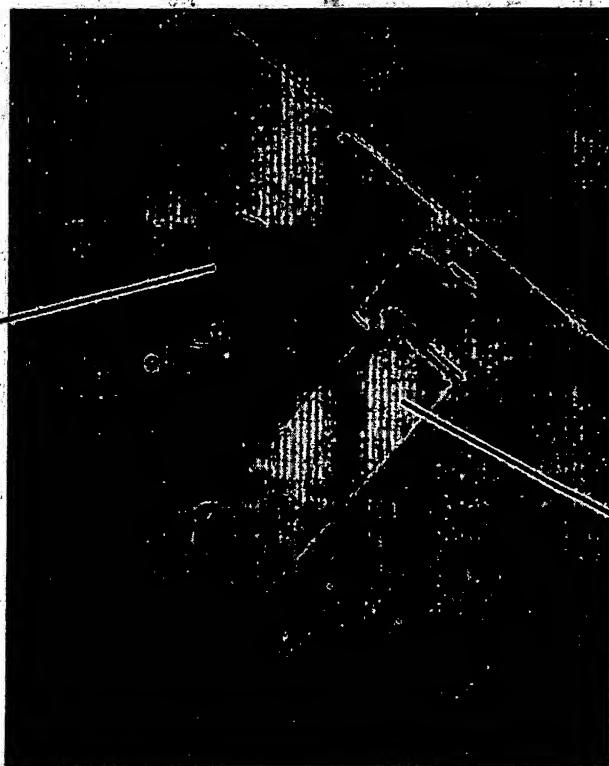
This block Engages the vehicles cross bar by the user tightening the screw.

Concept Shown From Top.



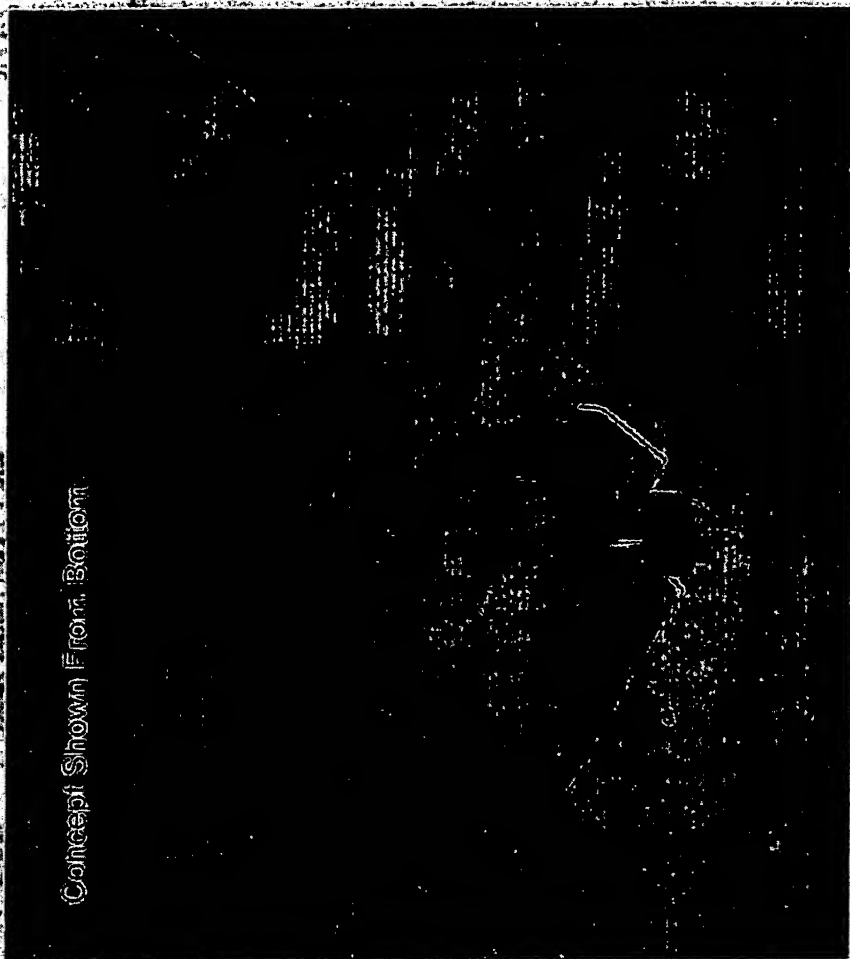
Attachment Method #2- User Pivots the block which moves the engagement block towards vehicle cross bar. The engagement piece on the opposite end is stationary causing tension between the 2 cross bars thus securing the cargo box.

Pivoting Block



Engagement Block - This Block Engages the vehicles cross bar by the Pivoting the block.

Concept Shown From Bottom

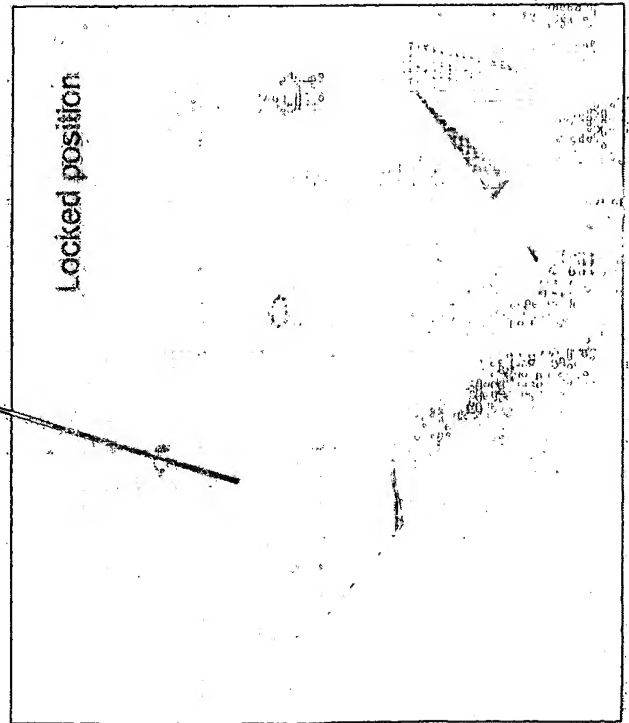


Engagement Block and Pivot Block shown in the Open Position

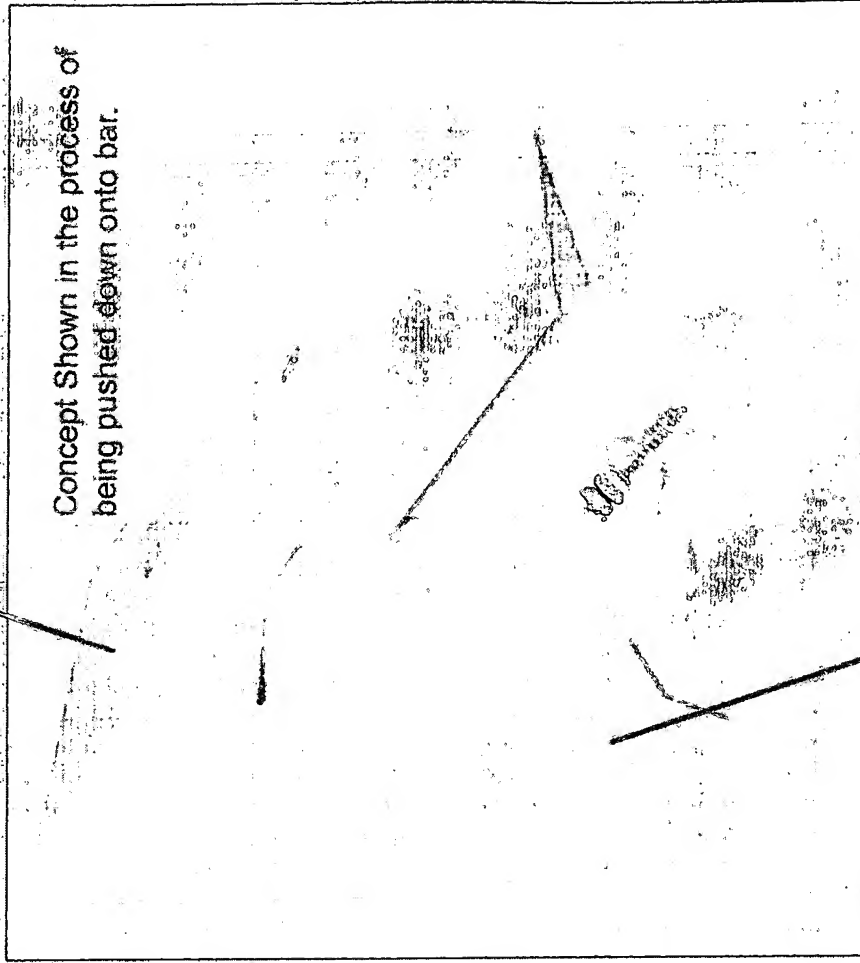


Attachment Method #3- User Simply aligns the pivot block onto the vehicles cross bar and presses the cargo box down. This forces the engagement block to pivot up and thus causes an interference fit. The engagement piece on the opposite end is stationary causing tension between the 2 cross bars thus securing the cargo box.

Pivoting Block

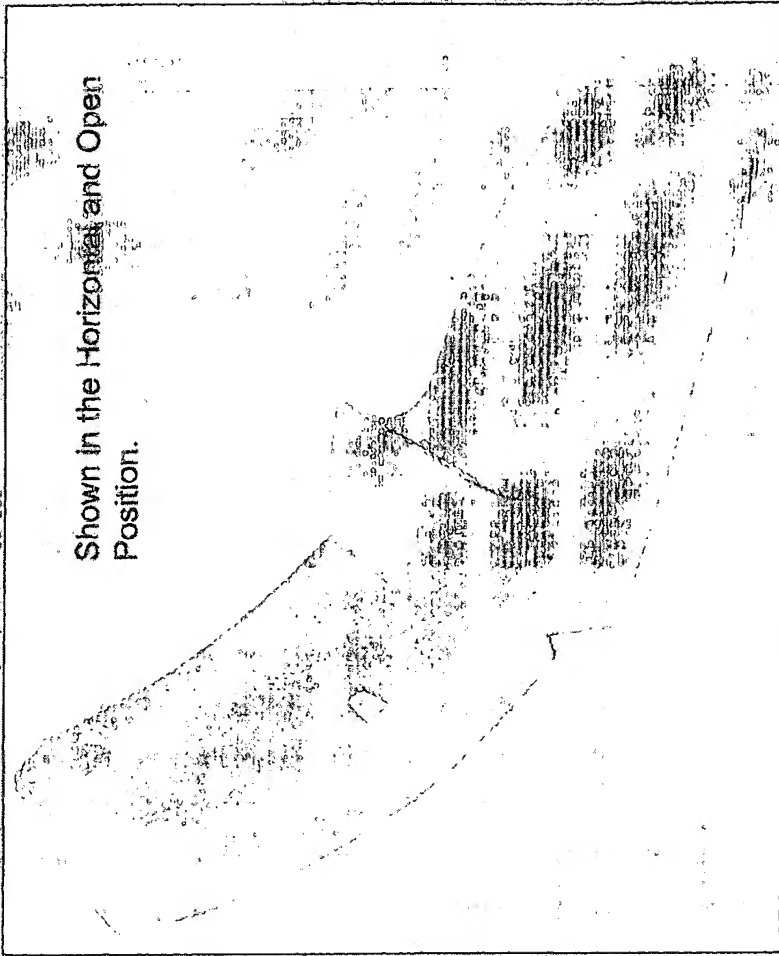


This plan would be attached to the bottom of the bottom housing

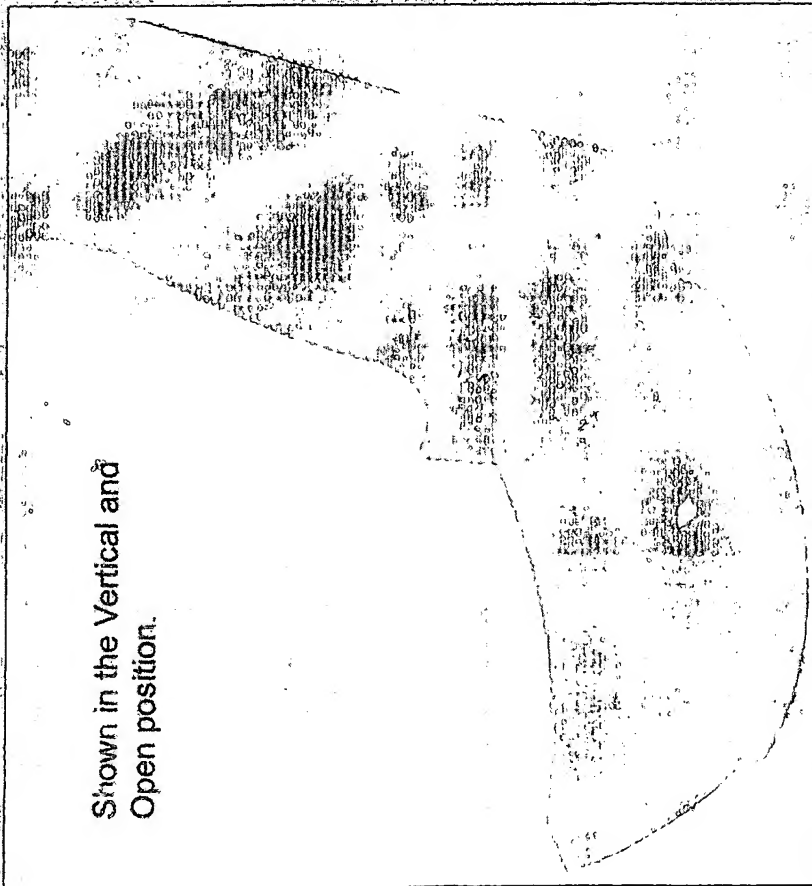


Engagment Block Pivots up to cause an interference fit.

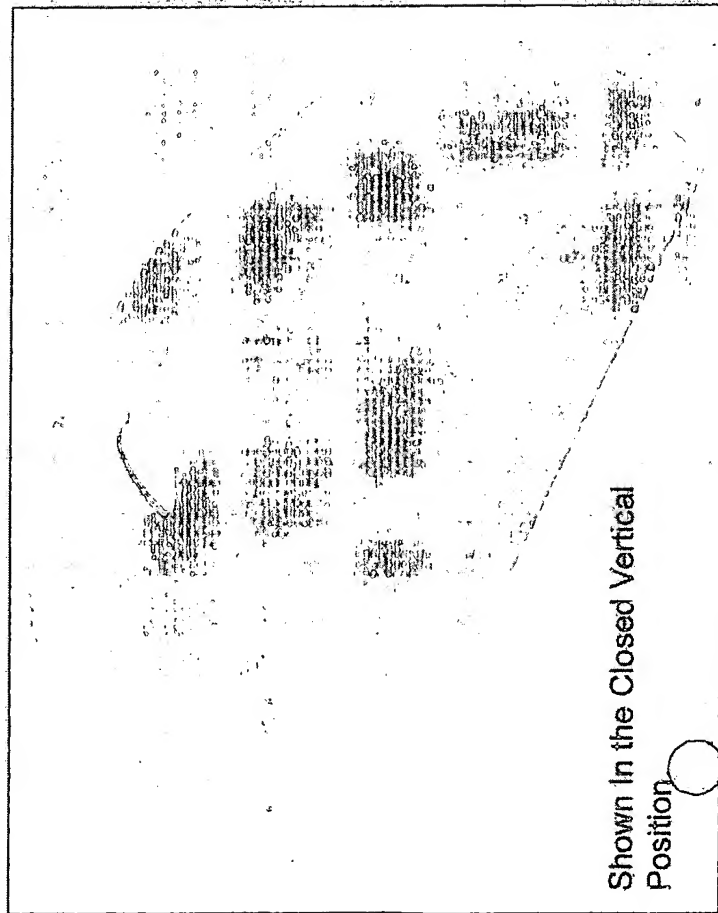
Shown in the Horizontal and Open Position.

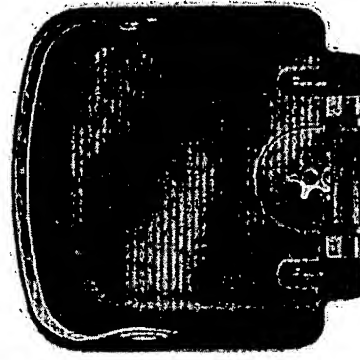
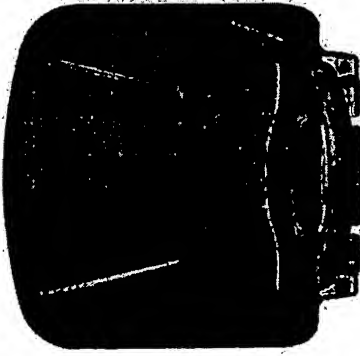
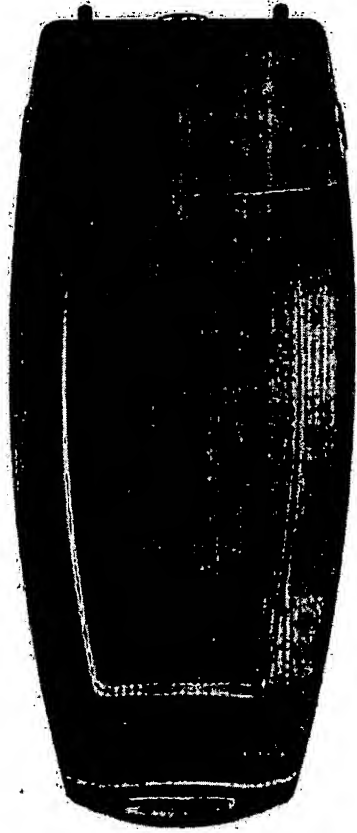


Shown in the Vertical and Open position.

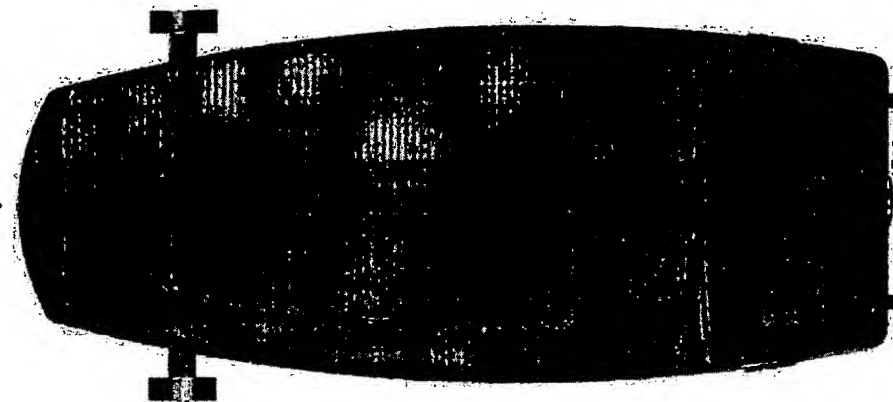
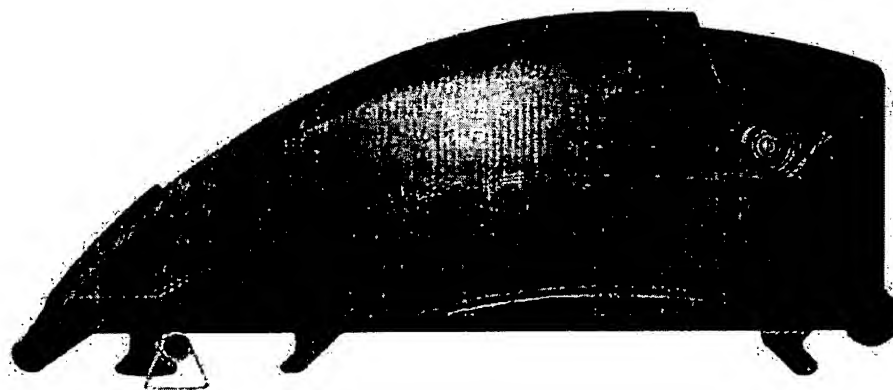
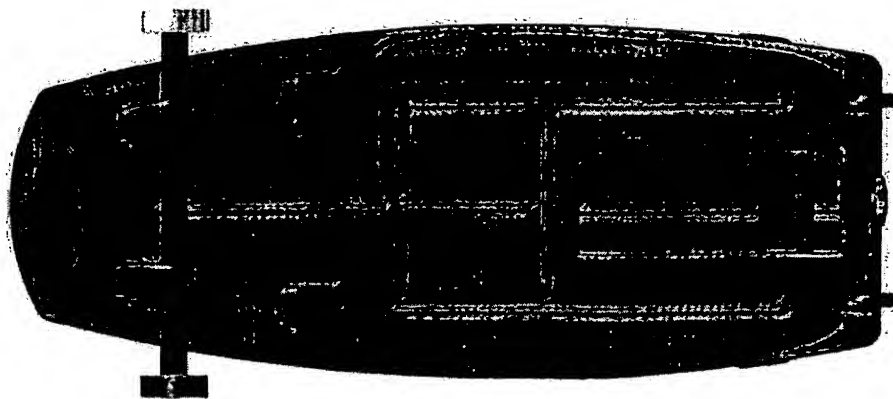


Shown in the Closed Vertical Position.





PROPRIETARY & CONFIDENTIAL



PROPRIETARY & CONFIDENTIAL

Volume: 187.7 cu in.

Material: TBD

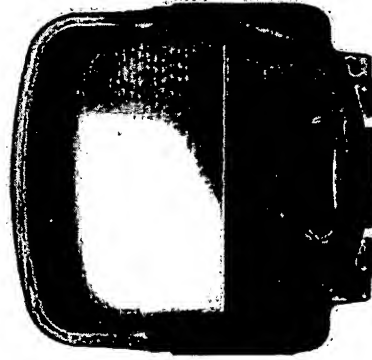
Nominal Wall Thickness: .125"

Manufacturing Process: Rotational Molded

Color: TBD

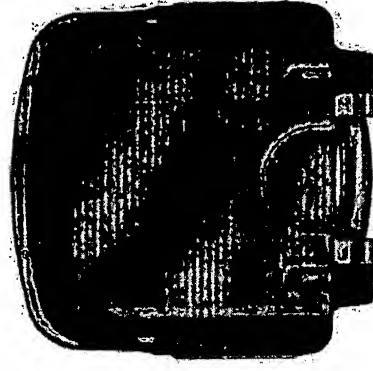
Opening (cut out)

Handle



Front Feet

Middle Feet

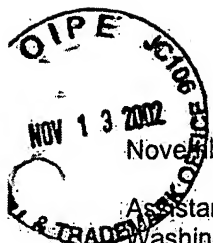


PROPRIETARY & CONFIDENTIAL

Volume: 89.7 Cubic Inches
Material: ABS (with UV inhibitors)
Nominal Wall Thickness: .125"
Manufacturing Process: Vacuum Formed
Color: TBD



APPENDIX B



November 6th, 2002

Assistant Commissioner of Patents
Washington, District of Columbia 20231

DISCLOSURE DOCUMENT NO.



521393

RETAINED FOR 2 YEARS

THIS IS NOT A PATENT APPLICATION

PTO-1652 (8/99)

Request for Participation in Disclosure Document Program:

Disclosure of **Jonathan Hurd**

Entitled: **Mounting Substrate Device for Vehicle Roof Racks**

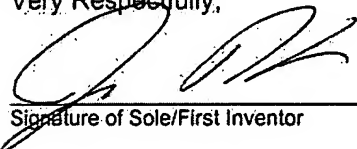
Sir/ Madam:

Attached is a disclosure of the above entitled invention (consisting of 1 Sheet of written description and 6 separate sheets of drawings or photos), a check for \$10.00, a stamped, addressed return envelope, and a duplicate copy of this letter.

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Very Respectfully,


Signature of Sole/First Inventor

JONATHAN HURD
Print Name of Sole/First Inventor

Signature of Joint/Second Inventor

Print Name of Joint/Second Inventor

1114 Woodlawn Ave.
Ann Arbor, MI 48104

Enclosure:

As Stated Above



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY OF COMMERCE AND
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

DISCLOSURE DOCUMENT RECEIPT NOTICE

Receipt of your Disclosure Document and Government fee of \$10 is acknowledged. The date of receipt and the Disclosure Document Identification number are indicated on this notice. This date and number should be referred to in all communication related to this Disclosure Document.

NOTICE TO INVENTORS

It should be clearly understood that a Disclosure Document is not a patent application, nor will its receipt date in any way become the effective filing date of a later filed patent application. A Disclosure Document may be relied upon only as evidence of conception of an invention and a patent application should be diligently filed if patent protection is desired.

Your Disclosure Document will be retained for two years after the date it was received by the Patent and Trademark Office (PTO) and will be destroyed thereafter unless it is referred to in a related patent application filed within the two-year period. The Disclosure Document may be referred to by way of a letter of transmittal in a new patent application or by a separate letter filed in a pending application.

The two-year retention period should not be considered to be a "grace period" during which the inventor can wait to file his or her patent application without possible loss of benefits. It must be recognized that in establishing priority of invention an affidavit or testimony referring to a Disclosure Document must usually also establish diligence in completing the invention or in filing the patent application since the filing of the Disclosure Document.

If you are not familiar with what is considered to be "diligence in completing the invention" or "reduction to practice" under the patent law or if you have other questions about patent matters, you are advised to consult with an attorney or agent registered to practice before the PTO. The publication, *Attorneys and Agents Registered to Practice Before the United States Patent and Trademark Office*, is available from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Patent attorneys and agents are also listed in the telephone directory of most major cities. Also, many large cities have associations of patent attorneys which may be consulted.

You are also reminded that any public use or sale in the United States or publication of your invention anywhere in the world more than one year prior to the filing of a patent application on that invention will prohibit the granting of a patent on it.

Disclosures of inventions which have been understood and witnessed by persons and/or notarized are other examples of evidence which may also be used to establish priority.

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Inventor(s): Jonathan Hurd

Address(es): 1114 Woodlawn Ave, Ann Arbor, MI. 48104

Telephone: 734-995-9052

Title of Invention: **Mounting Substrate Device for Vehicle Roof Racks**

Idea Conception: This idea came to me during the course of working on a Portable Automobile Roof Rack Cargo Box, which I have previously disclosed in document 509917. One of my primary focuses of the Roof Rack Cargo Box was to make the Cargo Carrier simple to use from the storage to use and back to storage. The Scissor Lock is a simple easy means of doing this. Most of the current Cargo Boxes are very large, cumbersome to attach and remove and need to be stored in the horizontal position. While Cargo Bags (made of fabrics) often require the user to strap down 4-8 individual straps. The scissor design I am disclosing is a versatile design that allows for very simple operation. Because of it's ease of use it allows the consumer to utilize their Vehicle Cargo Racks for a much broader range of uses.

Advantages of the Invention: There are several advantages to the Scissor Lock design. One advantage is the ease of attaching the mounting rectangle to a vehicles roof rack bars. After a simple one time initial adjustment of the feet, all the user has to do is simply place the Scissor Mount onto the vehicle roof, lower it into position, pivot the locking bar and the unit is attached. Simply reverse this procedure for removal. Another advantage of this design is the ability to mount a wide variety of items onto the Scissor Mount. One could easily envision mounting a wide range of plastic containers and fabric bags for a wide range of uses. Depending on the size and shape of these containers and bags the user could most likely keep his gear inside while storing and mounting. Yet another advantage of the design is the ability to store the scissor mount and whatever is attached to it in a vertical position by placing it on a hook mounted to the wall. A further advantage of the Scissor Lock is to angle the Swing Arm out and stand the device in the vertical position, thus allowing the user easy access to items mounted to the Scissor Mount. Yet another advantage is the tubular nature of the design allows for easy adjustment of the mounting feet that are used to engage the vehicle roof rack bars. While these tubes could be round or rectangular a round tube would allow for the feet to pivot allowing for the curvature found on some vehicle roof racks. Furthermore the tubular construction allows for the easy attachment of wheels.

Description & Sketch: The Scissor Lock Mounting Device is comprised of several parts. The two main components are the Scissor mount, which is shown as the larger rectangle, and the Swing Arm, which is shown as a U shaped piece. The Swing Arm pivots off of the Scissor Mount. There are two adjustable feet mounted to the Scissor Mount and the Swing Arm (for a total of 4 feet) that allow the user to set the tension of the fit. There is also a pivot plate that is mounted to the Swing Arm that pivots on top of the front bar of the Scissor Mount thus securing the entire device to the vehicle roof rack (this could easily be adapted for locking with a pad lock etc.). The design also allows for wheels to be attached to the Scissor Mount.

Ramifications: By using this product the user has an easy method for handling their gear or other articles from storage to use and back to storage. Furthermore because of the easy method for attaching and removing the Scissor Mount the user will be much more apt to utilize the roof rack for all types of items.

Inventor(s): _____

Date: _____

The above confidential information is Witnessed and Understood:

Date: _____

The Scissor Lock Mounting Device for Vehicle Roof Racks operates by being able to place pressure in the opposite directions against the vehicles roof rack bars as shown by the arrow in the middle of image #1. In essence, if the roof rack bars are 24" apart the user will set the rear and front feet of the Scissor Lock 24-25" apart, thus creating a interference fit and securing the scissor lock to the bars.

By placing the pivot point in the middle of the Scissor Mount I have created a large lever that makes it very easy for the user to create the necessary amount of pressure to secure the feet onto the bars.

Scissor Mount (Main Rectangle)

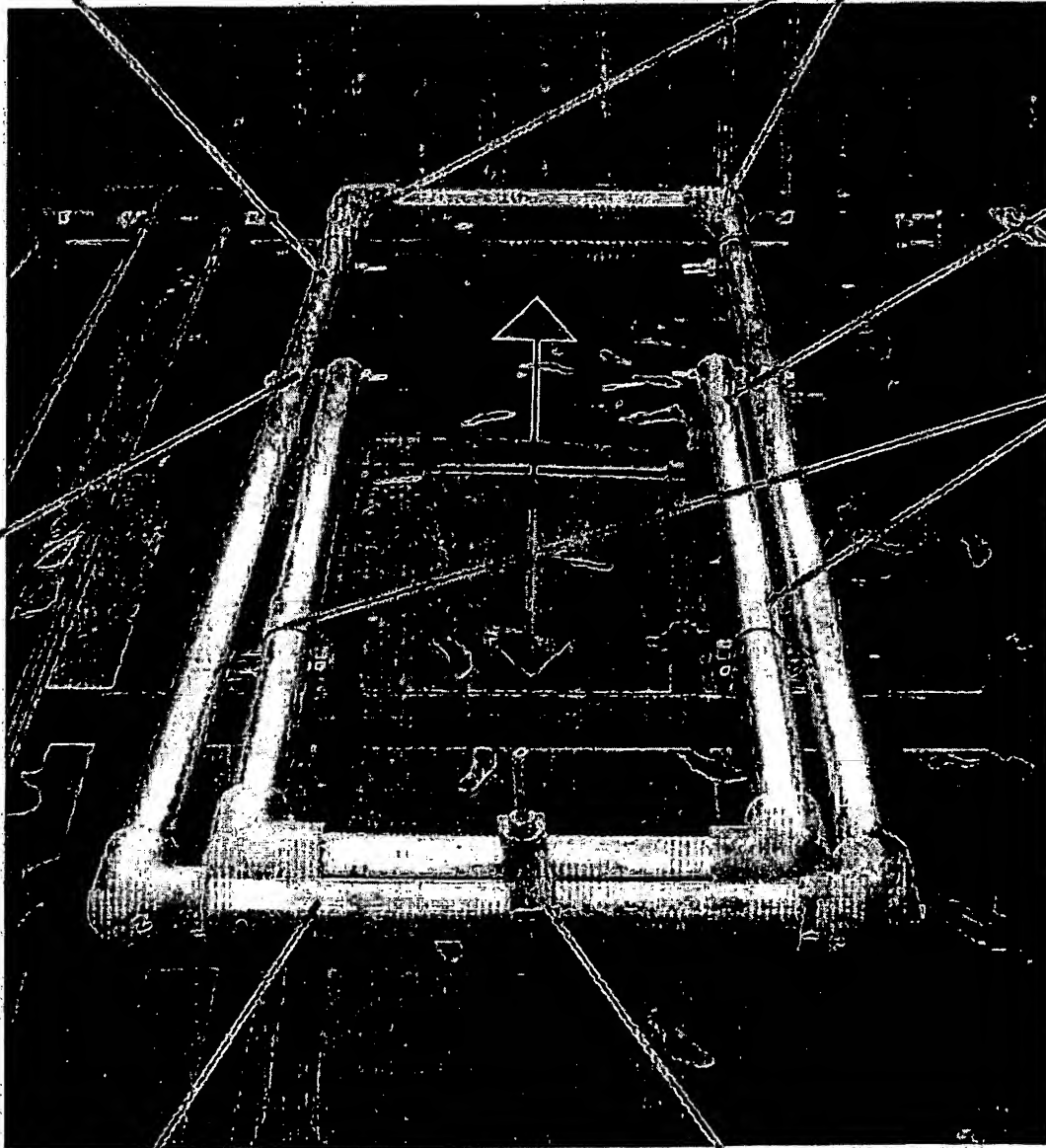
IMAGE #1

Front Feet

Swing
Arm

Rear Feet

Pivot Point



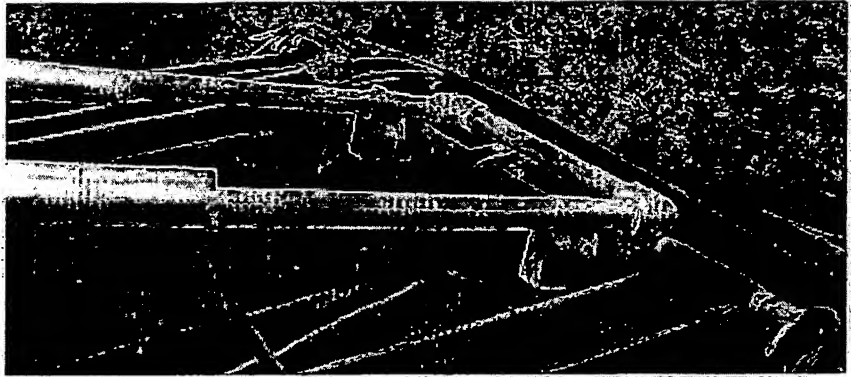
A bag, hard shell case, etc. is attached to the Scissor Mount

Pivot plate locks the unit onto the vehicle rack.

The operation of the Scissor Lock is a simple procedure.

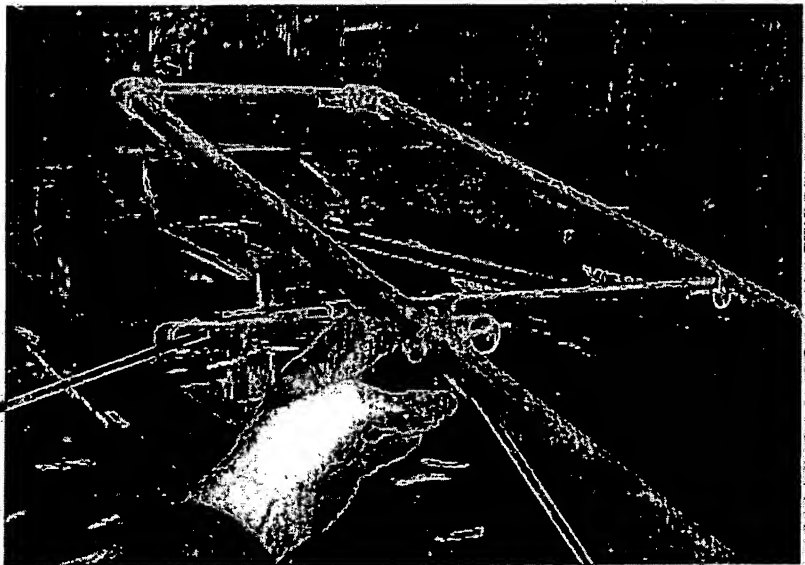
- (1) Place the front feet (attached to the Scissor Mount) under the front bar of the vehicle roof rack.
- (2) Release the pivot plate and allow the Swing Arm feet to drop down on the inside of the rear bar.
- (3) Lower the scissor mount down to the bar which will secure the device to the rack and then simply rotate the pivot plate back, thus locking the Scissor lock to the Vehicle roof rack

STEP #1 - Place front Feet under front vehicle bar.



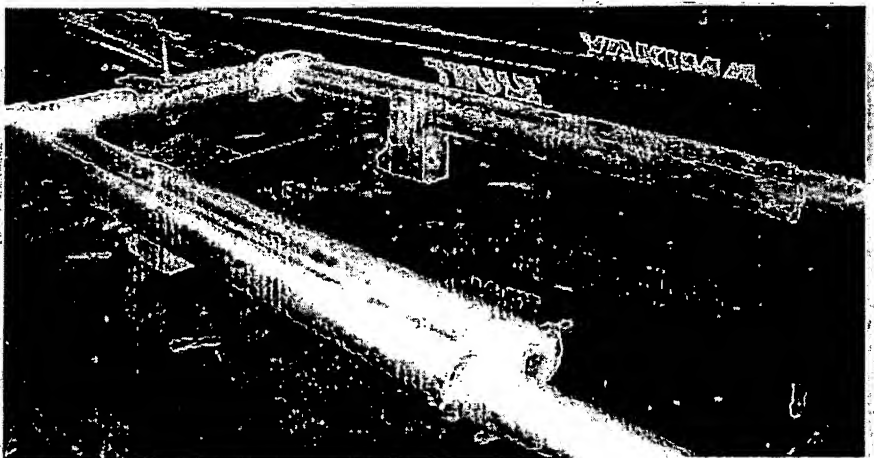
STEP #2 - Release Pivot plate and allow rear feet to engage the inside of the rear vehicle bar.

When the Swing Arm is disengaged from the Scissor Mount you are able to hook the feet under the rear bar



Pivot Point

STEP #3 - Lower Scissor Mount down and engage pivot plate

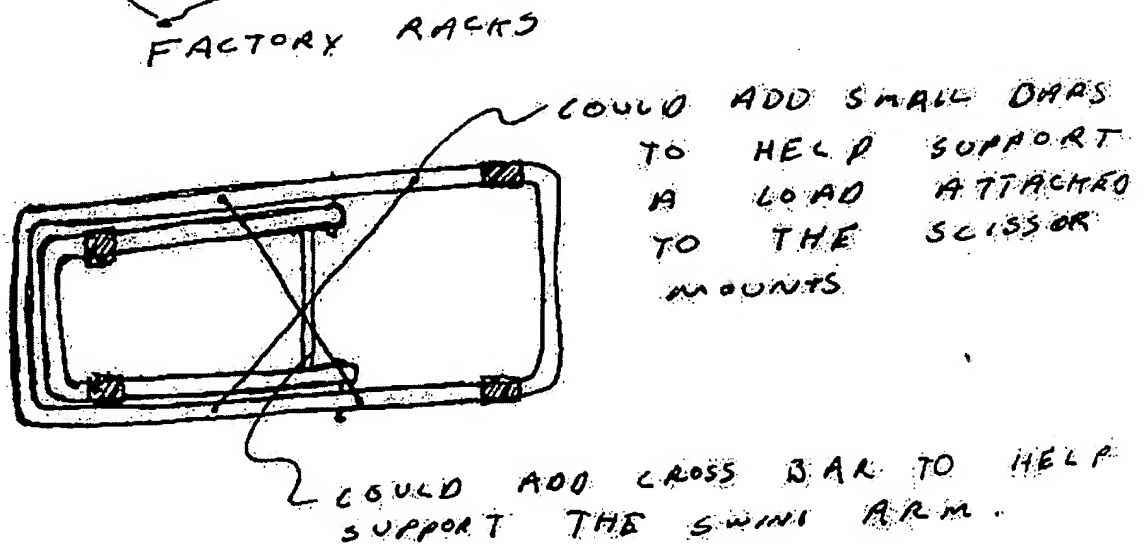
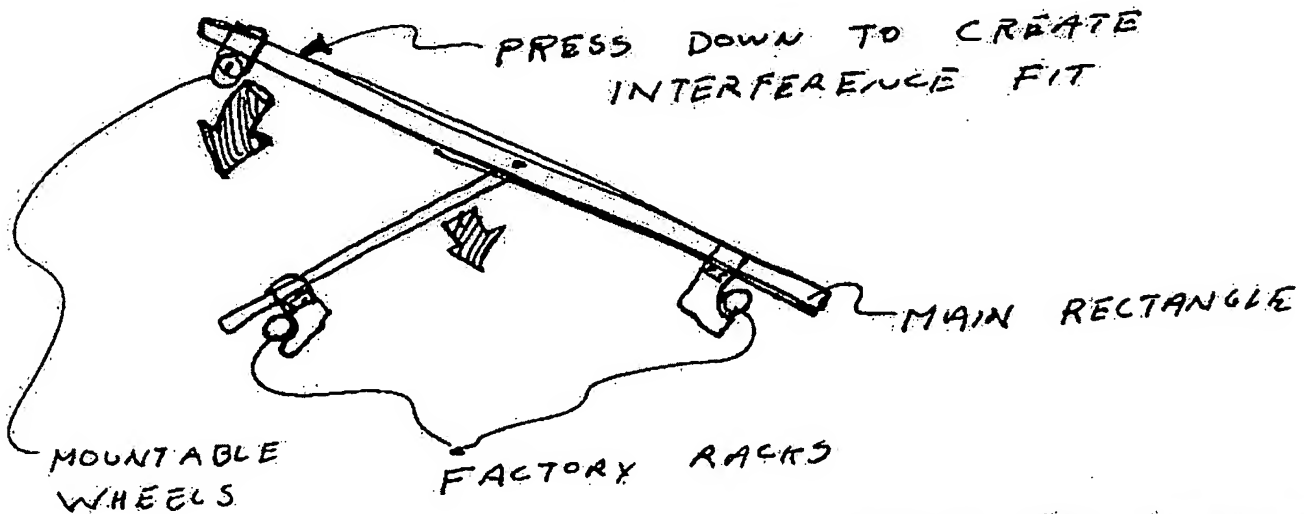
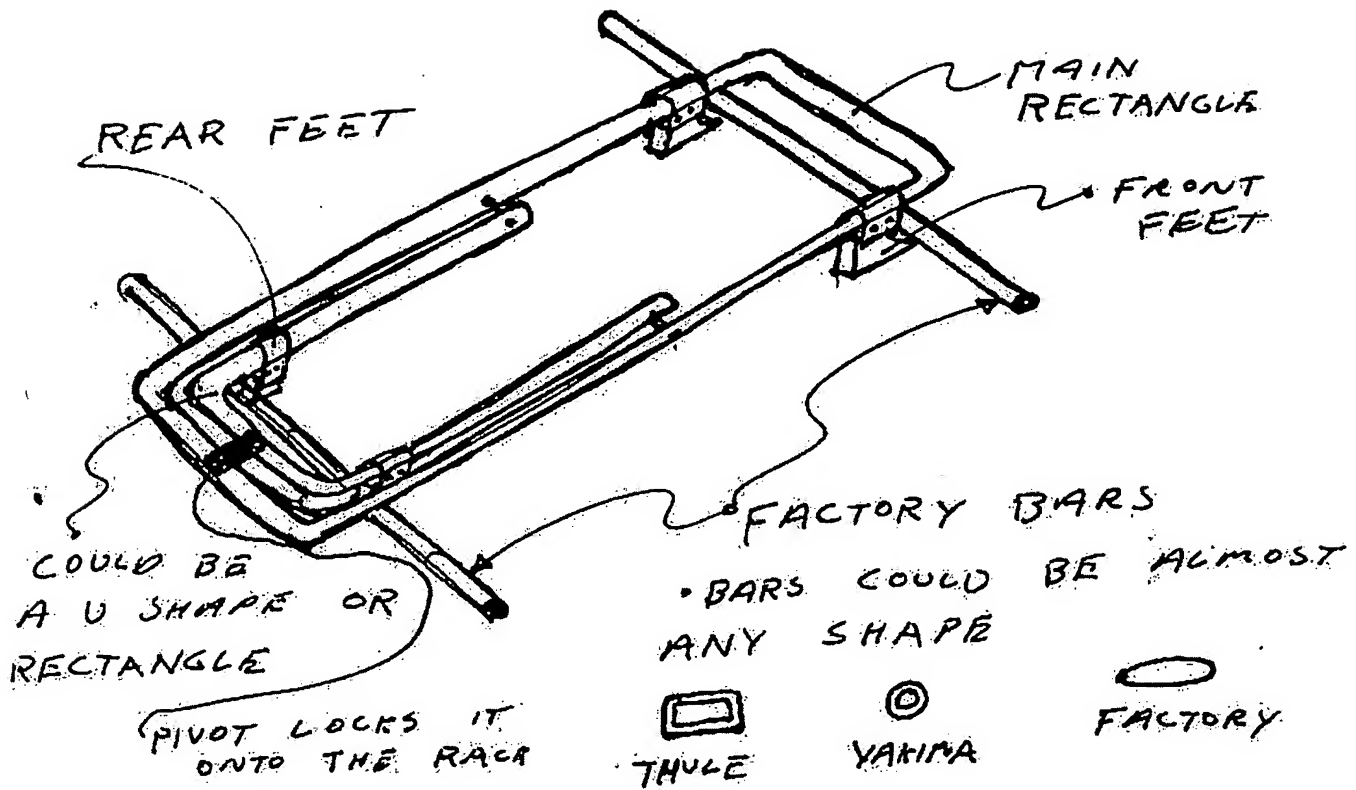


Another advantage to my design is the ability to stand the bag and it's contents upright.

Bag, plastic Container, etc. would be attached to the scissor mount rectangle.

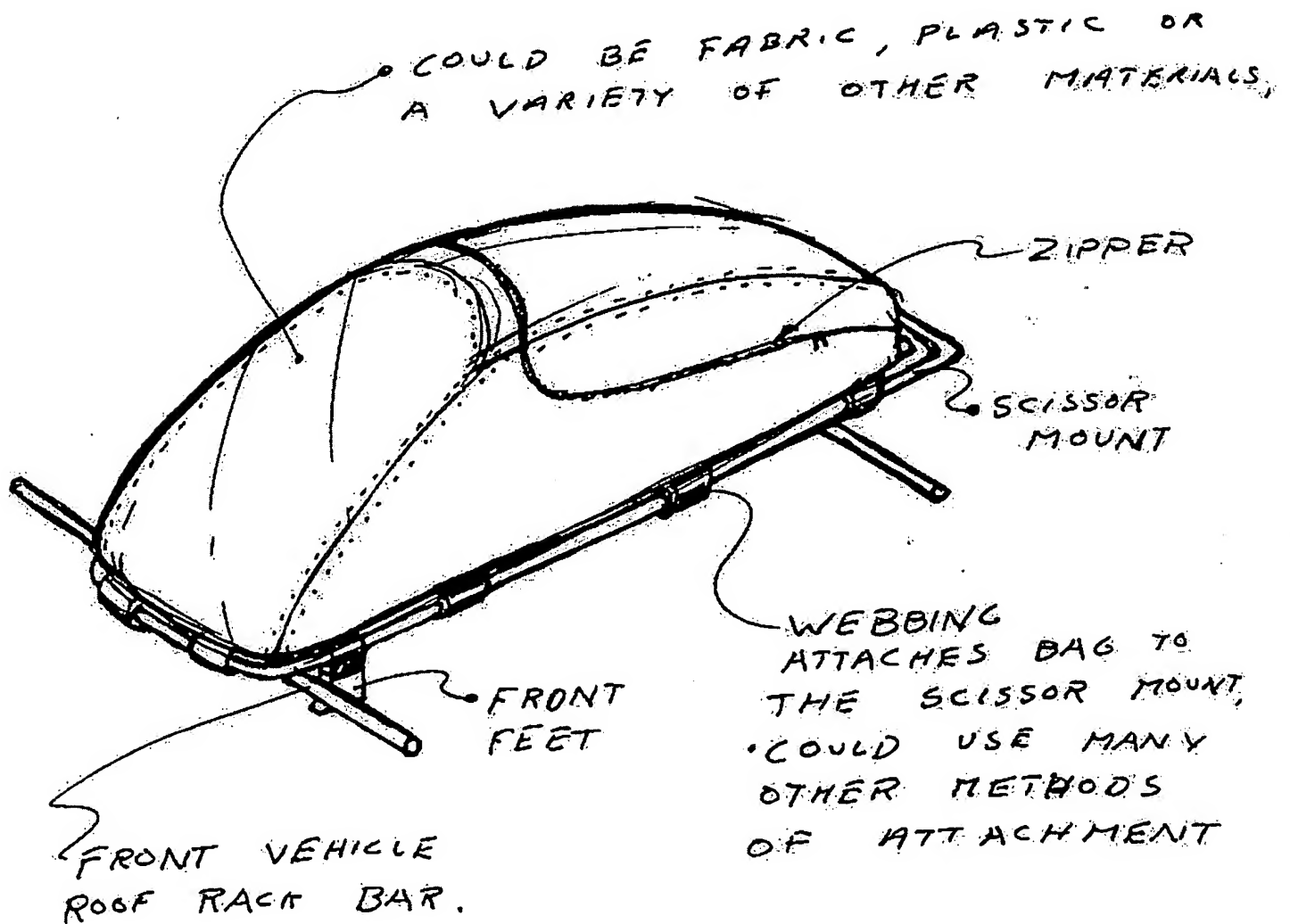
The Pivot point allows the Swing Arm to act as a kickstand.





Copied From
My Sketch Book

SCISSOR LOCK MOUNT CONCEPT 11/05/02



• BAG COULD BE ALMOST ANY MATERIAL

Copied From My Sketch Book

Page 6 of 6

APPENDIX C

2125 Bishop Circle West
Dexter, MI 48130-1560
Phone: (734) 426-3655
Fax: (734) 426-2725

Quote Coil

Quote Number:	12756	Contact:	Jon Hurd
Quote Date:	03/28/03	Expires:	04/27/03
Customer:	COIL	Inquiry:	
Salesman:	Mark Novitsch	Terms:	1 % 15 - Net 30 Days
Ship Via:	Protomatic Delivery	Phone:	(734) 972-1159
FOB:	Dexter, Michigan	FAX:	

<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Revision</u>	<u>Quantity</u>	<u>Price</u>
	125-A	Foot bracket		4	\$179.43/EA
				400	\$5.56/EA
				1,000	\$4.49/EA
				4,000	\$3.99/EA
2	130-A	Latch		1	\$286.42/EA
				100	\$5.41/EA
				250	\$3.46/EA
				1,000	\$2.60/EA

By NOVITSCH, MARK
Protomatic, Inc.

APPENDIX D

CUSTOMER PART No.	CUSTOMER	FAB MASTERS	DIF No.
DESCRIPTION	FOOT EXTRUSION		PROPOSAL No. H-51615

(3) R0.015
R0.30

0.312
7.92

0.107
4.75
0.062
1.57

0.020
0.51

30°
(3)

DETAIL 201

(x) = R0.030(R0.76) (3)
 (·) = R0.030(R1.27) (9)

SEE REVIEW DRAWING

0.010 DP x 30°
V-GROOVE I.D.
CENTERED

WALL THICKNESS 0.125(3.18) EXCEPT AS SHOWN

DATE	REV	DESCRIPTION	BY

EST. AREA	1.453	sq. in.	EST. AREA	937.272	sq. in.
EST. WT.	1.743	lbs./ft.	EST. WT.	2.594	kg./m.
EST. PER.	22.514	in.	EST. PER.	571.862	mm.
OUT PER.	11.502	in.	OUT PER.	292.1	mm.
IN.	3.926	in.	C.G.D.	99.731	in.
FINISH	M/F		ALLOY & TEMP.	6063	
SCALE	1:1		DATE	06/02/2003	

ALUMINUM EXTRUSION INC.

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SIGNED: DATE: 6-25-03

NOTE: BULK ALL CORNERS WITH 0.015" (0.38 MM) RADIUS UNLESS OTHERWISE NOTED. STANDARD TOLERANCES TO APPLY UNLESS OTHERWISE SPECIFIED.

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